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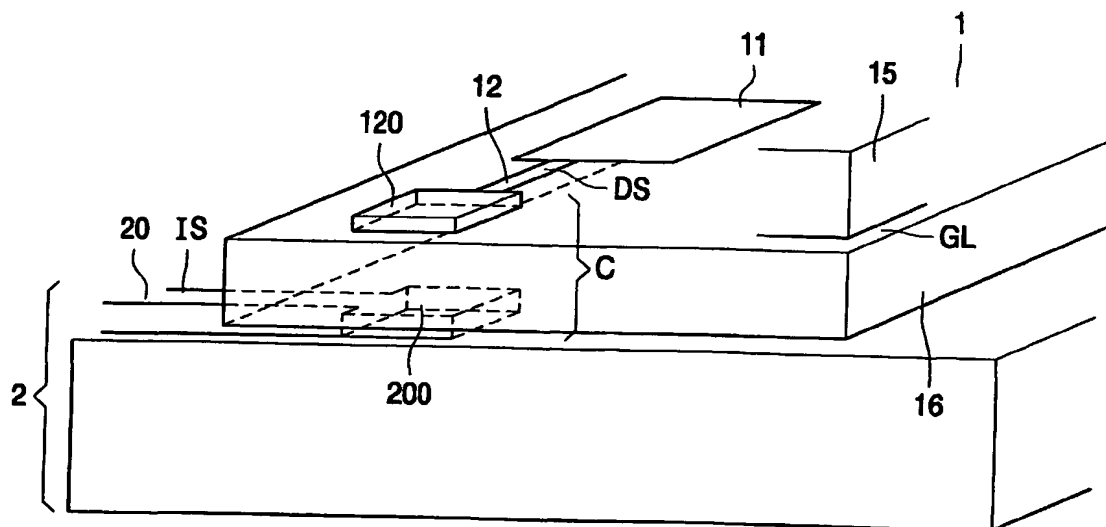
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## Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,

[Continued on next page]

(54) Title: DISPLAY DEVICE WITH CAPACITIVELY CONNECTED PADS



(57) Abstract: A system comprises a display (1) with a substrate (16) and a carrier (2). The display (1) comprises pixels (11) and display conductors (12) which supply display signals (DS) to the pixels (11). The carrier (2) comprises carrier conductors (20) for carrying input signals (IS). The display conductors (12) and the carrier conductors (20) are positioned with respect to each other to obtain capacitors (C) between corresponding ones of the display conductors (12) and the carrier conductors (20) to capacitively transfer the input signals (IS) on the carrier conductors (20) to the display conductors (12).



IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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# INTERNATIONAL SEARCH REPORT

Int'l Application No  
CT/IB 03/05764

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G09G3/20 G02F1/13 G09G3/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G09G G02F G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 633 542 A (PHILIPS ELECTRONICS UK LTD ;PHILIPS ELECTRONICS NV (NL)) 11 January 1995 (1995-01-11)	1,2,5, 12,17,18
Y	abstract; figure 1 column 5, line 33 - column 7, line 36	6
X	US 4 952 031 A (TSUNODA ICHIRO ET AL) 28 August 1990 (1990-08-28)	1,2,5, 12,17,18
Y	abstract; figures 2,3,8 column 7, line 41 - column 10, line 41	6
Y	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 24, 11 May 2001 (2001-05-11) -& JP 2001 196172 A (TDK CORP), 19 July 2001 (2001-07-19) abstract paragraph '0007!	6

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the International search

1 April 2004

Date of mailing of the International search report

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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IB 03/05764

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-7, 12, 17, 18

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7,12,17,18

A matrix display device in which the transport of the driving signals (ie: between the drivers and the pixels) is done via a capacitive coupling using pads placed at the opposite sides of the substrate, the substrate forming the dielectric medium of such capacitive connection.

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2. claim: 8

The second concept relates to a matrix display device in which the transport of the driving signals (ie: between the drivers and the pixels) is done via a capacitive, inductive or optical coupling wherein a strip of glue is provided to seal two substrates and the capacitive, inductive or optical pads are arranged to substantially coincide with the glue strip

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3. claims: 9,10

The third concept relates to a matrix display device in which the transport of the driving signals (ie: between the drivers and the pixels) is done via a capacitive, inductive or optical coupling wherein the capacitive pads are connected to a buffer input and a buffer output stage to provide the signal to the pixel elements

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4. claim: 11

The fourth concept relates to a matrix display device in which the transport of the driving signals (ie: between the drivers and the pixels) is done via a capacitive, inductive or optical coupling wherein the column driver and the row driver are associated to shift registers

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5. claims: 13-16, 19, 20

The fifth concept relates to a matrix display device in which the transport of the driving signals (ie: between the drivers and the pixels) is done via a capacitive, inductive or optical coupling wherein capacitive or conductive means provides power to the display.

The reasons leading to this conclusion are presented below.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

In: International Application No

PCT/IB 03/05764

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0633542	A	11-01-1995	DE 69428638 D1	22-11-2001
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